



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

| APPLICATION NO.   | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------|----------------------|---------------------|------------------|
| 10/709,981  | 06/10/2004  | Yi Wei Liu           | TOCP0004USA         | 3980             |
| 27765   | 7590        | 11/15/2006           | EXAMINER            |                  |
| NORTH AMERICA INTELLECTUAL PROPERTY CORPORATION<br>P.O. BOX 506<br>MERRIFIELD, VA 22116 |             |                      | DESIR, JEAN WICEL   |                  |
|   |             |                      | ART UNIT            | PAPER NUMBER     |
|   |             |                      | 2622                |                  |

DATE MAILED: 11/15/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

|                              |                                      |                                   |  |
|------------------------------|--------------------------------------|-----------------------------------|--|
| <b>Office Action Summary</b> | <b>Application No.</b><br>10/709,981 | <b>Applicant(s)</b><br>LIU ET AL. |  |
|                              | <b>Examiner</b><br>Jean W. Désir     | <b>Art Unit</b><br>2622           |  |

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-5 is/are pending in the application.  
     4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 4 and 5 is/are rejected.
- 7) ☒ Claim(s) 1-3 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
     a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                  | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____.  |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1, 4, 5 are rejected under 35 U.S.C. 102(b) as being anticipated by Hiller et al (US 6,233,024).

#### **Claim 1:**

Hiller discloses:

A projection lens system of a rear-projection type television (Fig. 8), comprising:

“a screen having an image projection surface that is normal to a horizontal reference line”, see Fig. 8 item 2 which a screen as claimed;

“a projection lens component having a center optical axis that is obliquely offset with respect to said horizontal reference line, wherein said projection lens component is disposed in front of said screen”, see Fig. 8 item 1 which is a projection lens as claimed;

“a first mirror disposed between said screen and said projection lens component”, see Fig. 8 item 4 which is a first mirror as claimed;

“and a second mirror (item 3 of Fig. 8) disposed said first mirror (4) and said screen (2) for reflectively projecting an image reflected from said first mirror (4) onto said screen (2), wherein said second mirror (3) is not in parallel with said first mirror (4)”.

Art Unit: 2622

Claim 4:

"wherein said second mirror (3) is disposed at an acute angle ( $\delta$ ) with respect to said image projection surface (2), said first mirror (4) is disposed at an acute angle ( $\theta$ , see also col. 9 line 63) with respect to said image projection surface (2), and wherein angle  $\delta$  ranges between  $15^\circ$  and  $40^\circ$ , inclusive".

Claim 5 is disclosed, see col. 10 lines 18-20.

### ***Claim Objections***

3. Claim 1 is objected to because of the following informalities: the word --between-- should be inserted after the phrase "a second mirror disposed". Appropriate correction is required.

### ***Allowable Subject Matter***

4. Claims 2, 3 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

### **Conclusion**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jean W. Désir whose telephone number is (571) 272 7344. The examiner can normally be reached on 5/4/9 - First Friday Off.

Art Unit: 2622

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David L. Ometz can be reached on (571) 272 7593. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

**JWD**

**Nov. 7, 06**

A handwritten signature in black ink, appearing to read 'David Ometz', with a long horizontal line extending to the right.

DAVID OMETZ  
SUPERVISORY PATENT EXAMINER